CTDEP Lean Journey: Lean Project Team Summary Status Report

Submittal Date: July 1, 2010

Lean Event Dates: May 17-21, 2010

Project: Air Quality Monitoring Data Acquisition Project (May 2010 Kaizen Event)
Bureau: Bureau of Air Management (BAM)/Planning and Standards Division

Team: Total number of team members = 11 **(**10 **staff within Division /** 1 **staff outside Division)**

Team Sponsor(s)/Title(s):	Anne Gobin, Bureau Chief/BAM
Team Leader(s)/Title(s):	Peter Babich
Team Members /Titles:	Dean Tully, Randy Semagin, Reid Matusek, Mark Demko, Trevor DePass, Dennis Demchak, Michael Geigert and Angela Levy
Team Champion(s)/Title(s):	Tracy Babbidge, Director Planning and Standards Division/BAM

Opportunity Statement: The current process to determine fine particle (PM2.5) concentrations used for compliance with the National Ambient Air Quality Standards (NAAQS) includes several steps from the time of sampling in the field, completion of field check sheets, data entry, quality assurance/quality control, analysis and submission into an EPA database. There are a number of opportunities for improving this process to minimize steps in the data handling process as well as to improve efficiency in the field precision and accuracy checks.

Objective: Conduct Value Stream Mapping to evaluate the currrent process for acquiring fine particle air quality monitoring data that is collected to determine the State's compliance with the PM2.5 NAAQS. The project will evaluate the process from the point of sample collection in the field through the point of accepting the data as meeting all applicable EPA quality assurance requirements for submission into EPA's Air Quality System.

Goals/Key Performance Indicators:

Pre-Kaizen Event Goals – Date: May 2010	**Post-Kaizen Event Results/Key Performance Indicators – Status Date:** July 2010
Establish communications to filter-based instruments to eliminate transcription errors and need for technician downloading files and to minimize site visits.	In process; steps made to request IT support and schedule initial site installations.
Establish all data in one database - Integrate clean room and filter-based PM2.5 with other air data in SQL Server database.	In process; met with vendor in June 2010 to test software and request additional features. Ongoing beta testing is currently being conducted.
Improvement in response time to equipment malfunctions - Establish timely analytical processes to identify analomies and discrepancies in the data and ensure immediate corrective actions is taken.	In process; need to establish first two goals to adequately address this goal.
Reduce timeframe for reporting PM2.5 FRM data to AQS from 90 days to 60 days.	In process; need to establish first two goals to adequately address this goal.
Data capture for all sites for all quarters > 85%.	In process; need to establish first two goals to adequately address this goal.

Spaghetti Diagram showing distance traveled for the process under review during the *Pre-Kaizen phase:* *Post- Kaizen phase:*
Comments:

Value Stream Mapping: The activities and steps, both value and non-value added, as shown in the Pre-Kaizen state versus Post-Kaizen desired state.		
Type of Process	**Pre-Kaizen – # of Processes**	**Post-Kaizen – # of Processes**
Valued Added	10	8
No Value Added but Necessary	32	23
No Value Added	5	0
Waiting	8	4
Transport	8	3
Total	63	38
Percent Reduction in the Number of Total Steps = 40**% Reduction**		

The Post-Kaizen desired state has resulted in a number of improved program efficiencies and include the following:

- We're currently only one month into the Post-Kaizen phase, so although much work has been done already, it's still to early to comment on improved program efficiencies.

Highlights and Implementation of the Project Plan (2, 6 and 12 month deadlines):

Two Month Goals - 1) Request IT Support: Request made and granted; working with IT to schedule support. 2) Router Configuration / Transfer aircard configurations; scheduling date for initial config/installation. 3) Software interface installation/testing; currently working with vendor and beta-testing software. 4) Purchase Teflon Cassettes; PR submitted although has not been approved/entered into Core. 5) EPA Contact List; no progress to date. 6) Technician Buy-in/Training; no progress to date. 7) Constituents Contact List; no progress to date. 8) Morning Report Review/Documentation; documentation on process currently being developed with templates ofreports as models once online and available. 9) Monthly Tech Meetings; first monthly meeting held, others scheduled. 10) Quarterly Division Meetings; first quarterly meeting held June 2010 during which the LEAN project was presented to entire Windsor Lab staff as well as Attainment Planning Group. Next two quarterly meetings also scheduled (Sep & Dec 2010).

Six Month Goals - 1) Network Communications Installed; no progress to date. 2) Data validation tools; no progress to date. 3) Tech Training/monthly meetings; no progress to date. 4) Monthly data submittal; no progress to date. 5) Air Data Info Page Link; in progress. 6) Stakeholder relationship; in progress.

Twelve Month Goals - 1) Data availability on the web; no progress to date. 2) Paper to paperless assessment; no progress to date. 3) KPI assessment; no progress to date.

Additional Comments/Observations/WOWS/Innovations from the Team:
Initial comment is that we fully intend to utilize visuals to track progress of this project. A variation of the project plan will be highly visible so it is clear where we are at and where we are going. The two-month, six-month and twelve-month goals will be listed with clear deadlines, the task owner and the participants involved in order to meet deadlines. The current plan is to have this visual in place by July 2010.

Will comment more thoroughly in this section as implementing this LEAN project moves forward.

Revision Date: June 23, 2010